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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,334	12/16/2003	Katsuyuki Watanabe	FS-F03219-01	3695
37398	7590	11/15/2005	EXAMINER	
TAIYO CORPORATION 401 HOLLAND LANE #407 ALEXANDRIA, VA 22314			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,334

Applicant(s)

WATANABE ET AL.

Examiner

Thorl Chea

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This first office action is responsive to the communication on December 16, 2003; claims 1-19 are pending in this instance application.
2. Claims 14, 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claiming of reducing agent for an organic silver salt fails to further limit the reducing agent presented in claim 1. There is no difference in reducing in claim 1 and the reducing agent in claims 14, 16.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1752

5. Claims 1-14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US Patent No. 6,120,983) in view of Ichikawa et al (US Patent No. 6,593,075).

Okada et al discloses a photothermographic material containing silver halide, a non-photosensitive organic silver salt, a reducing agent and a compounds having an X as an adsorption promoting silver halide and D is an electron donative group of atoms and L₁ is a covalent or a linking group, wherein X can be a mercapto groups and D is hydroxoamic acid; the reducing agent including hindered phenol and the toning agent. See the composition of the photothermographic material in the abstract; the definition of D, X column 5, lines 1-30; column 6, lines 51-68; the reducing agent in column 38, lines 43-54, and toning agent in column 39, lines 33-68. See also the exemplified compound in columns 11-20 and the silver halide having iodide content of 0.1 to 40 mole % in column 36, lines 5-15. Okada et al discloses a compound having two functional group, an adsorption promoting silver halide and a reducing agent, but fails to disclose the group P represents a pyrazolidone group claimed in the present claimed invention. However, the pyralidone compound has been known as reducing agent and known in Ichikawa et al. See Ichikawa et al in columns 29-33, compound II-1 to II-19. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was to a known equivalent reducing agent taught in Ichikwa et al as electron donative group taught in Okada et al with an expectation of success of providing an equivalent compound.

6. Claims 15, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US Patent No. 6,120,983) in view of Ichikawa et al (US Patent No. 6,593,075) as applied to claims 1-14, 16 above, and further in view of EP 1096310 A2 (EP'310). Okada et al and Ichikawa et al may not discloses a compound having phosphoryl group or reducing of phenol

Art Unit: 1752

type claimed in claim 15, 17-19. However, these compounds have been known as reducing agent for silver ions and nucleating agent such as taught in EP'310 on pages 6-11, and page 20. it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to the hindered phenol compound and the compound having phosphoryl group as reducing agent and nucleating agent for the material taught in Okada et al, and thereby provide a material as claimed.

7. Claims 1-19 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ohezi et al (US 2004/0033454A1). See compound of formula (4), page 6, [0115]; page 9, (B₁₃), the exemplified compound (40) on page 15; the compound of formula (D), page 29, [0277]; and pages 48-49, claims 10, 14. Ohezi et al exemplify the claimed compound having two mercapto groups and a pyrazilidone group. Therefore, the claimed invention lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use any compound within the scope of formula (4) of Ohezi et al in the phothermographic material with an expectation of achieving a highly useful material.

8. Claims 1-19 are rejected under 35 U.S.C. 103(a) as obvious over Oka et al (US 2003/0232288). See compound of Oka et al on page 51, [0731], compound formula I''; pages 60, compound I'69 to compound I''72; the hydrogen bonding type compound on pages 72, formula (D'); and page 93, claims 19-21 and page 194, claims 23-30. Oka et al fails to an atomic group having a mercapto group, but fails to exemplify the atomic group having at least two mercapto groups. However, it would have been obvious to the worker of ordinary skill in the art at the time

Art Unit: 1752

the invention was made to associate the "A" group of the compound taught in Oka et al one or more group of similar functional group with an expectation of success.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-19 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18, 23, 29-40 of copending Application No. 10/285,644. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to associate the "A" group of the compound taught in Oka et al one or more group of similar functional group with an expectation of success.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

11. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Art Unit: 1752

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *th*
October 21, 2005

Thorl Chea
Thorl Chea
Primary Examiner
Art Unit 1752